



# **MAASAI MARA UNIVERSITY**

**REGULAR UNIVERSITY EXAMINATIONS  
2022/2023 ACADEMIC YEAR  
FIRST YEAR FIRST SEMESTER**

**SCHOOL OF NATURAL RESOURCE, TOURISM AND  
HOSPITALITY  
DIPLOMA IN TOURISM AND WILDLIFE  
MANAGEMENT**

**COURSE CODE: NDTW 116**

**COURSE TITLE: INTRODUCTION TO ECOLOGY**

**DATE: 5<sup>TH</sup> DEC. 2022**

**TIME: 1430-1630**

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**Instructions**

*Answer **ALL** questions in section A and any other **THREE** in section B.*

## **SECTION A - (25 MARKS)**

### **QUESTION ONE**

1. Define the following **(6 marks)**
  - a) Population and Community
  - b) Niche segregation and realized niche
  - c) Commensalism and amensalism
2. State **FOUR** considerations you would make before choosing the methods to be used to estimate population of animals. **(4 Marks)**
3. Using well labeled diagrams explain the difference between secondary and primary succession **(5 marks)**
4. Give Six differences between Batesian and Mullerian mimicry as a strategy used by prey to defend themselves **(6 Marks)**
5. State some of the distinguishing characteristics of K selected species **(4 Marks)**

## **SECTION B-(45MARKS)**

### **QUESTION TWO**

Using diagrams and illustrations where necessary, discuss the ecological principles **(15 marks)**

### **QUESTION THREE**

With the aid of examples and illustrations, write adequate short notes on the following sub-topics:

- a) Populations growth
- b) Survivorship curve
- c) Population regulation in animals according to “climatic” schools of thought

### **QUESTION FOUR**

- a) Discuss in details giving examples in each case the different types of competition **(7mks)**
- b) Discuss why species diversity is highest at the equator compared to higher latitudes. **(8 marks)**

### **QUESTION FIVE**

Discuss how invasive species affect native wildlife and ecosystems (15 marks)

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